

Sub A1> 1. ~~An artificially produced canine milk substitute composition comprising, on a dry matter basis, from about 35 to 45% protein, from about 25 to 35% fat, and from about 10 to 25% carbohydrates.~~

5 2. ~~The composition of claim 1 in which the source of protein comprises casein and whey in a weight ratio of about 70:30.~~

3. The composition of claim 1 comprising about 38% protein.

10 4. The composition of claim 1 comprising about 28% fat.

5. The composition of claim 1 comprising about 19% carbohydrates.

15 6. The composition of claim 1 in which the source of fat is selected from the group consisting of corn oil, canola oil, butter oil, arachidonic acid, docosahexaenoic acid, and blends thereof.

20 7. The composition of claim 1 containing fatty acids expressed as a percentage of total fatty acids on a dry matter basis, of from 15 to 19% palmitic acid, from about 5 to 9% stearic acid, from about 34 to 38% oleic acid, from about 17 to 21% linoleic acid, from about 1 to 4%  $\alpha$ -linolenic acid, from about 0.5 to 2% arachidonic acid, from about 0.2 to 1% docosahexaenoic acid (DHA), from about 2 to 5% Omega 3 fatty acids, from about 18 to 22% Omega 6 fatty acids, and from about 1 to 4% trans fatty acids.

25 8. The composition of claim 1 containing amino acids expressed as a percentage of total essential amino acids on a dry matter basis of from about 6 to 10% arginine, 4 to 8% histidine, 8 to 12% isoleucine, 16 to 20% leucine, from about 13 to 17% lysine, from about 2 to 7% methionine, from about 6 to 10% phenylalanine, from about 8 to 12% threonine, from about 1 to 4% tryptophan, from about 9 to 13% valine, from about 2 to 5% cystine, and from about 2 to 30 6% tyrosine.

9. The composition of claim 1 containing from about 4 to 8% by weight lactose.
10. The composition of claim 1 containing about 0.50% by weight fructooligosaccharide.
- 5 11. The composition of claim 1 containing from about 27 to 37% by weight fatty acids.
12. The composition of claim 1 containing from about 15 to 25% by weight essential amino acids.

10 13. An artificially produced canine milk substitute composition comprising, on a dry matter basis, from about 35 to 45% protein, from about 25 to 35% fat, and from about 10 to 25% by weight carbohydrates, said composition further comprising from about 4 to 8% by weight lactose and about 0.50% by weight fructooligosaccharide.

15 14. An artificially produced canine milk substitute composition comprising, on a dry matter basis, from about 35 to 45% protein, from about 25 to 35% fat, and from about 10 to 25% carbohydrates, wherein the source of fat is selected from the group consisting of corn oil, canola oil, butter oil, arachidonic acid, docosahexaenoic acid, and blends thereof.